



SUBSTITUTE SPECIFICATION

[001] DEVICE FOR THE OPTIMIZATION OF HYDRAULICALLY CONTROLLED ENGAGEMENT OF CLUTCHES USED IN MARINE TRANSMISSIONS

*OK to  
Enter  
Sub. Spec.  
RML 6/24/07*

[002] This application is a national stage completion of PCT/EP2003/010759 filed September 26, 2003 which claims priority for Italian Application Serial No. PD2002A251 filed October 1, 2005.

[003] FILED OF THE INVENTION

[004] As is known, structural design of a marine transmission - reference is made to Fig. 1 of attached sketches - includes presentation of clutch A as a subassembly installed in housing B, which is arranged between engine C (power generator) and the propeller axle D (power consumer).

[005] BACKGROUND OF THE INVENTION

[006] Clutch A comprises in particular:

- A drive shaft E on which the individual components of the rotating clutch A are supported.
- A bell F, which is firmly linked to the drive shaft E and the engine C and which also constitutes the support for the control piston L.
- A disk carrier pinion H opposite the drive shaft E and freely rotating on bearings for transmission of the motion of the propeller axle D.
- Clutch disks A1, whose rotational movement is guided by the bell F.
- Driven clutch disks A2 arranged alternately with disks A1 and constituting the clutch package.
- The control piston L (ring with hydraulic sealing on outer diameter to establish sealing towards the cylinder and hydraulic sealing on inner diameter to establish sealing towards the drive shaft), which is arranged opposite the counter